SONY

UHF SYNTHESIZED WIRELESS MICROPHONE

WRT-807A

SERVICE MANUAL

CE Model
AU Model

1st Edition

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

1. OPERATING INSTRUCTIONS

SONY

3-866-337-21(1)

UHF Synthesized Wireless Microphone

Operating Instructions page 1 GB
Bedienungsanleitung Seite 1 DE
Wireless Channel Lists / Übertragungskanallisten

WRT-807A

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CE62 CE69

English

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Precautions

- The unit is designed for use in ambient temperature range of 0°C to 50°C (32°F to 122°F).
- Do not place the unit on or near heat sources, such as lighting equipment, power amplifiers, or in a place subject to direct sunlight or excessive moisture. In such places, the external finish or internal parts of the unit may be damaged.
- If the unit is used in a very humid or dusty place or in a place subject to an active gas, clean its surface as well as the connectors with a dry, soft cloth soon after use. Lengthy use of the unit in such places or not cleaning it after its use in such places may shorten its life.
- When cleaning the unit, never use organic solvents such as thinners or benzine, which will damage the finish of the unit.
- The unit has been factory adjusted precisely. Do not tamper with its internal parts or attempt to repair it.
- Do not attempt to recharge an alkaline battery.
- Do not dispose of a battery in fire. Do not disassemble or short-cirtuit a battery.
- Make sure to use an LR6 (size-AA) alkaline battery.
- Make sure the poles of the battery match the + and – markings in the battery holder.
- Remove the battery when the unit will not be used for a long period of time.

Introduction

The WRT-807A is a UHF-synthesized wireless microphone for use in a 800-MHz band UHF-synthesized wireless microphone system.
The WRT-807A operates in conjunction with the WRR-800A/801A/802A, MB-806A UHF Synthesized Tuner for vocal concentration.

The WRT-807A can be also used with existing Sony wireless microphone systems consisting of the WRT-810A/820A/822A/830A UHF Synthesized Transmitter and WRR-810A/820A/840A/850A UHF Synthesized Tuner.

Transmitting Channel Band

The microphone/transmitter and tuners of wireless microphone systems are classified by frequency band.

A 14-MHz frequency band (or two consecutive-numbered TV channels, such as 62 and 63 of the WRT-807A/CE62 model) or an 8-MHz frequency band (or TV channel 69 and UK General Use) is assigned to each microphone/transmitter and tuner model.
In building a UHF wireless microphone system, be sure to pair a microphone/transmitter with a tuner that has the same TV channel number.

CE62 model
A 14-MHz frequency band is assigned to the WRT-807A/CE62 model, permitting it to operate any of 111 carrier frequencies in 125-kHz steps of the Sony original channel plan or 561 carrier frequencies in 25-kHz steps of the German User Groups in the range of TV channels 62 and 63.

CE69 model
An 8-MHz frequency band is assigned to the WRT-807A/CE69 model, permitting it to operate on any of 64 carrier frequencies in 125-kHz steps of the Sony original channel plan in the range of TV channel 69 or 14 carrier frequencies in 25-kHz steps of the UK General Use.
For the selectable wireless channels and frequencies, see "Wireless Channel Lists."

Features

Phase Locked Loop (PLL) synthesized system
The WRT-807A features a refined phase locked loop (PLL) synthesizer circuit.

POWER switch with holding function
The POWER switch can be locked in the ON position to protect against accidental power cut-offs.

Low-battery notification on tuner
When the microphone battery is low, the microphone sends a warning to the WRR-800A/801A/802A/805A/850A, MB-806A in the form of "Battery status information."
This information is sent to the WRR-800A/801A/802A/805A/850A, MB-806A about one hour before the battery goes dead to allow the battery to be safely replaced.
When the WRR-800A/801A/802A/805A/850A, MB-806A receives this information, the LED and the LCD on tuner panel start to flash.

Powered by readily available battery type
The built-in, high-efficiency DC-DC converter provides about five hours of continuous and stable operation with just a single LR6 (size-AA) alkaline battery.

LCD readout of various information
The microphones LCD shows the current channel number, frequency, input attenuation setting, and residual battery power.
The accumulated battery use time is also indicated (in one-minute increments) to allow precise monitoring of battery use.

Automatic saving of channel and input attenuation settings
All channel and input attenuation settings are automatically saved when the microphone is turned off (and are maintained even when the battery is removed), thus eliminating the need to make the same settings again the next time you use the microphone.

Highly reliable electronic attenuator
Adjustable in a range of 0 dB to 21 dB in 3-dB steps, the built-in input level attenuator reduces signal distortion during the input of excessively strong audio signals.

Tone signal-incorporated RF carrier signal
The microphone transmits an RF carrier signal that incorporates a tone signal to enable any tuner with a tone squelch circuit to pick out only the target audio signal.

Introduction

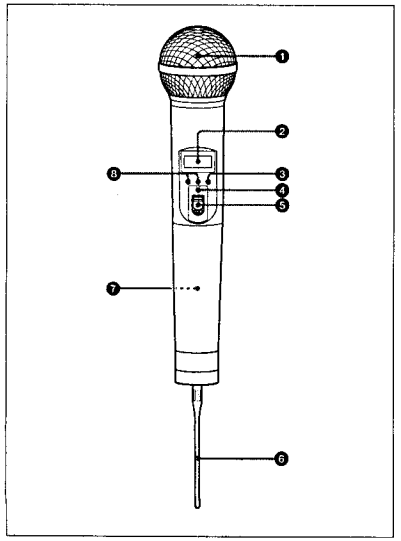
Wide dynamic range and low noise

The microphones compander (compressor/expander) system enables transmission over a wide dynamic range with minimum noise.

Notes on operation

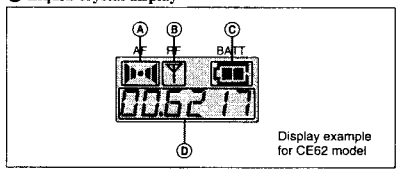
- When operating two or more microphones, keep the microphones separated from each other by a distance of at least 30 cm (1 foot).
- Keep microphones at least 3 meters (10 feet) away from the receiving antenna.

Parts Identification



❶ Wind screen
Protects against noise caused by wind.

❷ Liquid-crystal display



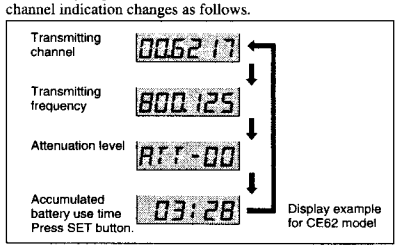
Ⓐ AF (audio input) indication
Lights whenever an audio signal stronger than the reference level is received.

Ⓑ RF (antenna output) indication
Lights during signal transmission from the antenna.

Ⓒ BATT (battery) indication
Shows the battery condition.
See "Battery indication" on page 8.

Parts Identification

Ⓓ CH (channel) indication
Displays the transmitting channel.
Each time you press the SET button in Transmit mode, the channel indication changes as follows.

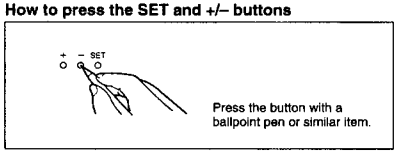


Transmitting channel: The current transmitting channel setting.
Transmitting frequency: The current transmitting frequency setting.
Attenuation: The input attenuation setting in decibels. Can be set within a range of 0 dB to 21 dB in 3-dB steps.
Accumulated battery use time: The accumulated time of battery use (in 1-minute increments).

To adjust these parameters, see "Changing the transmitting Channel" on page 9, "Changing the Input Attenuation Setting" on page 11 or "Resetting the Accumulated Battery Use Time Indication" on page 12.

❸ SET button
In Transmit mode, press this button to change the indicated items in the lower half of the liquid-crystal display.
To change to Setting mode, turn the POWER switch to ON while holding this button down. Then press this button to select the items to be indicated.

How to press the SET and +/– buttons

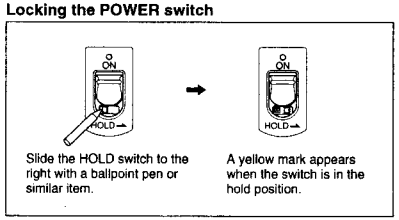


For details on Setting mode, see "Settings" on page 9.

❹ POWER indicator
Lights when the microphone is on.

❺ POWER switch
Turns the microphone ON or OFF.
When you set this switch to ON without holding down any other button, the microphone enters Transmit mode, and the signal of the selected channel is transmitted.
The HOLD switch appears when the POWER switch is set to ON.
Set the HOLD switch to the lock position to prevent an accidental power cut-off during microphone operation.

Locking the POWER switch


ON
HOLD
ON
HOLD
Slide the HOLD switch to the right with a ballpoint pen or similar item.
A yellow mark appears when the switch is in the hold position.

❻ Antenna

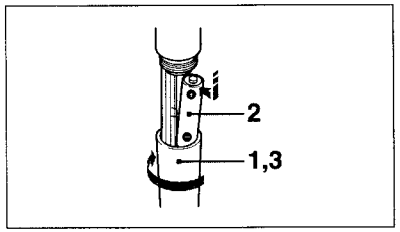
❼ Battery holder
Insert the battery here.
For details on inserting the battery, see "Power Supply" on page 8.

❽ + (+ selection) / – (– selection/reset) buttons
In Setting mode, use these buttons to select the transmitting channel and attenuation level, and use the – button to reset the accumulated battery use time indication to 00:00.
For details on Setting mode, see "Settings" on page 9.

Power Supply

The microphone can operate on one LR6 (size AA) alkaline battery continuously for about 5 hours at 25 °C (77°F).

Inserting the battery



1 Turn the grip in the direction of the arrow to open the battery holder.

2 Match the battery to the polarity markings and insert it into the battery holder.

3 Close the battery holder and lock the grip by turning it in the opposite direction of the arrow.

Battery indication

When you turn the power on, the battery condition is indicated by the BATT indication in the liquid-crystal display.

	1	2	3	4
BATT indication	Lights	Lights	Flashes	Goes off
Battery condition	Good	Less than half-charge	Almost exhausted	Completely exhausted

Note

The indication may be incorrect if the battery was not new when inserted. If you plan to use the microphone for a long period, replace the battery with a new one.

Settings

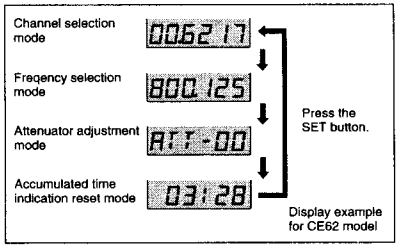
Initiating Setting Mode

Enter Setting mode to change the transmitting channel, the transmitting frequency and the attenuation level, or to reset the accumulated battery use time indication.

To enter Setting mode

While holding down the SET button, turn the POWER switch to ON.
Hold the SET button down until an indication appears on the liquid-crystal display.

The microphone enters Setting mode and the indication before the microphone was previously turned OFF flashes on the liquid-crystal display.
Pressing the SET button cycles the modes in the order of Channel selection mode, Frequency selection mode (page 9), Attenuator adjustment mode (page 11) and Accumulated time indication reset mode (see page 12).



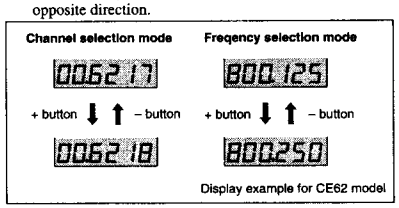
Changing the Transmitting Channel

The transmitting channel can be selected through either the channel number or the frequency.

1 Set the microphone to Setting mode.
If the channel number (or frequency) indication does not appear, press the SET button until the channel number (or frequency) indication appears.

Setting

2 Press the + or – button to select the channel number (or frequency).
Pressing the + button cycles the indication in the order shown in the tables in Overview of Channel Plan (page L-1). Pressing the – button cycles the indications in the opposite direction.



Hold down the button to change the channel number (or frequency) quickly.

3 When the desired channel number (or frequency) appears, turn the POWER switch to OFF to release Setting mode, or press the SET button to continue operations in Setting mode.

The next time you turn on the microphone (by turning the POWER switch to ON), the microphone will enter Transmit mode with the selected channel number (or frequency).

Notes

- The microphone cannot transmit in Setting mode.
- Make sure that the channel selected on the microphone is the same as that selected on the tuner being used in the same system.
- Depending on the noise or interference conditions, all selectable channels may not be usable. If necessary, you can determine which channels are usable by cycling the channel selection through a number of channels on the tuner with the microphone set to OFF. Those channels for which the RF indicator on the tuner does not light are usable.
- The microphone may not operate correctly if it is turned on immediately after being turned off in Setting mode. Wait for a few seconds before turning the power on again.

Changing the Input Attenuation Setting

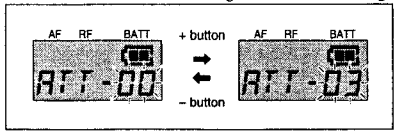
The input attenuation setting can be changed within a range of 0 dB to 21 dB (in 3-dB steps) in either Setting mode or Transmit mode.

Changing the input attenuation in Setting mode

1 Set the microphone to Setting mode.

2 If the attenuation level is not displayed, press the SET button until it appears.

3 Press the + or – button to change the attenuation setting.



Hold down the button to change the level quickly.

4 Once the desired level appears, turn the POWER switch to OFF to release Setting mode, or press the SET button to continue operations in Setting mode.

The next time you turn on the microphone (by turning the POWER switch to ON), the microphone enter Transmit mode with the selected attenuation setting.

Changing the input attenuation in Transmit mode

You can also change the input attenuation setting while transmitting in Transmit mode.

1 If the attenuation level is not displayed, press the SET button until it appears.

2 Press the + or – button to change the attenuation setting.

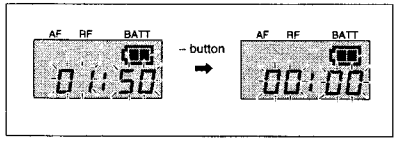
Resetting the Accumulated Battery Use Time Indication

The accumulated battery use time is the total time (in hours and minutes) the battery has been used. It is recorded whenever the WRT-807A is on.
Reset the indication to 00:00 whenever you replace the battery.

1 Set the microphone to Setting mode.

2 If the accumulated battery use time is not displayed, press the SET button until it appears.

3 Press the – button.
The indication resets to 00:00.



Press the + button while the 00:00 indication is on to go back to previous value.

4 Turn the POWER switch to OFF to release Setting mode.

Troubleshooting

If you have any problem using this unit, use the following checklist. Should any problem persist, consult your Sony dealer.

Symptom	Meaning/Remedy
The microphone does not turn on.	• The + and – poles of the battery do not match those of the battery compartment. ➔ Insert the battery with the poles correctly matched. • The battery is exhausted. ➔ Replace the battery with new one. • The battery terminals in the microphone are dirty. ➔ Clean the + and – terminals with a cotton swab.
The battery runs down quickly.	• The battery is exhausted. ➔ Replace the battery with new one. • A manganese battery is being used. ➔ Use an alkaline battery. The battery life of a manganese battery is less than half that of an alkaline battery. • The microphone is being used under cold conditions. ➔ The battery runs down quickly under cold conditions.
The microphone cannot be turned off.	The HOLD switch is in locked position. ➔ Change the HOLD switch to the unlocked position.
The channel cannot be changed.	An attempt was made to change the channel by pressing the SET button only. ➔ Turn the microphone off, then turn the microphone on again while holding down the SET button. Then change the channel with the + and – buttons.
There is no sound.	• The indication on the LCD is flashing. ➔ The microphone is in channel setting mode. Turn the power off, then on again. • The channel setting on the microphone is different from that on the tuner. ➔ Use the same channel setting for both the microphone and tuner. • The AF or RF indicator does not turn on. ➔ Confirm that the microphone and tuner are both turned on.

Symptom	Meaning/Remedy
The sound is weak.	• The attenuation level setting is too high. ➔ The output level is low. Press the – button in attenuation level setting mode to lower the attenuation level. • The volume on the amplifier, mixer or tuner is low. ➔ Adjust the volume.
There is distortion in the sound.	The attenuation level setting is too low. ➔ The input level is extremely high. Press the + button in attenuation level setting mode to raise the attenuation level.
There is sound interruption or noise.	• The receiver's antenna is incorrectly connected. ➔ Connect the antenna correctly according to the operation manual of the tuner or antenna divider. • The antenna divider is turned off. ➔ Turn the antenna divider on. It is possible for the tuner to receive signals even when the antenna divider is turned off, but sound interruption or noise may occur. • The RF indicator lights even when the microphone is off. ➔ Jammed transmissions are being received. Determine which channels are usable (i.e., channels for which the RF indicator on the tuner does not light) and set the tuner and microphone to the same usable channel. • Two or more microphones are set to the same channel. ➔ Make sure no two microphones are set to the same channel. Set each microphone to a different channel.

Specifications

Transmitter and modulator section

Oscillator	Crystal controlled PLL synthesizer
Type of emission	F3E
Carrier frequencies	CE62 model: 800.000 to 814.000 MHz CE69 model: 854.125 to 862.000 MHz
RF power output	10 mW (50-ohm load)
Tone signal	32.768 kHz
Battery condition signal	32.782 kHz
Type of antenna	1/4 -wavelength wire

Audio section

Microphone type	uni-directional dynamic microphone
Pre-emphasis	50 µs
Deviation	±5 kHz (94 dB_{SPL}[1]), 1 kHz input)
Frequency response	50 to 15,000 Hz
Signal-to-noise ratio	57 dB or more (A-weighted, modulation frequency 1 kHz, with ±5 kHz deviation at WRR-800A/801A)
Audio attenuator	0 to 21 dB, variable in 3-dB steps
Input level	151 dB_{SPL} (at audio attenuator 21 dB)

Power section

Power requirements	1.5 V DC (one LR6/size AA alkaline battery)
Battery life	Approx. 5 hours at 25°C or 77°F, with Sony LR6 alkaline battery

General

Operating temperature	0°C to +50°C (32°F to 122°F)
Storage temperature	–30°C to +60°C (–22°F to +140°F)
Dimensions	51 × 238 mm (diameter/length) not including antenna (2-1/8 × 9-3/8 inches)
Mass	Approx. 440 g (15.5 oz) including battery

Supplied accessory

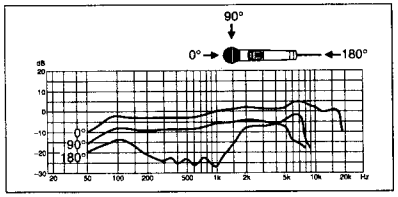
Operating Instructions (1)
Microphone holder (1)
Stand adaptor (PF 1/2 to W 3/8) (1)
Channel color seal (1)

Design and specifications are subject to change without notice.

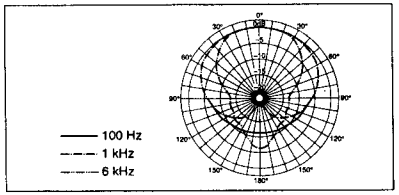
1) 0 dB_{SPL} = 2 × 10^{-5} Pa

Specifications

Standard frequency response



Standard directivity response



Error Messages

When a problem occurs, one of the following error messages may appear on the display.

Message	Contents	Measures
Error 11	An error occurred in backup memory data.	The data was initialized. Set the transmitting channel and the input attenuation again.
Error 21	The PLL synthesized circuit is in trouble.	Contact your Sony dealer.
Error 31	The battery voltage exceeds the allowable value.	Use the specified battery.
Error 41	Defect of an internal circuit.	Contact your Sony dealer.
Error 51	Defect of the A/D converter circuit.	
Error 61	Defect of an internal circuit.	

Wireless Channel Lists / Übertragungskanallisten

Overview of Channel Plan / Überblick über die Kanäle

Model Modell	Group Indication Gruppe-Anzeige	Frequency grid Frequenz-raster	User group Benutzer-gruppe	No. of simultaneously selectable channels Anzahl der Simultankanäle
CE62	00	125 kHz	Sony original channel groups Sony Kanal-gruppen	*(111)
	01			8
	02			9
	03			8
	04			10
	13			12
	62A	25 kHz	German-3 Deutsch-3	7
	62B			8
	62C			7
	62D			7
	62E		German-4 Deutsch-4	10
	63A		German-3 Deutsch-3	10
	63B			12
	63C			10
	63D			10
	63E		German-4 Deutsch-4	11
	62		German Deutsch	*(241)
	63			*(320)

German = German User Groups
Deutsch = Deutsche Benutzergruppen

Model Modell	Group Indication Gruppe-Anzeige	Frequency grid Frequenz-raster	User group Benutzer-gruppe	No. of simultaneously selectable channels Anzahl der Simultankanäle
CE69	00	125 kHz	Sony original channel groups Sony Kanal-gruppen	*(64)
	01			10
	L	25 kHz	UK General Use Allgemeine Verwendung in Groß-britannien	7
	H			7

*-marked number means a total number of selectable channels (not simultaneously).
Die Anzahl der insgesamt wählbaren Kanäle sind mit einem Stern (*) gekennzeichnet.

Wireless Channel Lists / Übertragungskanallisten

This product is designed to give excellent interference free operation in multi-channel systems. To maintain this, Sony recommends that one of the original Sony groups, number 01, 02, 03, 04 or 13 is selected.
These groups will offer excellent performance, free from mutual interference from other Sony wireless microphone transmitters in the selected group when used under the recommended operating conditions. The remaining groups are included for compliance with frequency regulations in various countries, and will not always guarantee interference free operation.

Dieses Produkt wurde für einwandfrei störungsfreien Betrieb in Mehrkanalsystemen ausgelegt. Um dies auch beim tatsächlichen Einsatz zu gewährleisten, empfiehlt es sich, eine der Sony-Gruppen Nummer 01, 02, 03, 04 oder 13 zu wählen.
Diese Gruppen bieten hervorragende Leistung frei von Streueinwirkungen mit anderen UHF-Mikrofonen/Sendern von Sony innerhalb der ausgewählten Gruppe und unter den empfohlenen Betriebsbedingungen. Die anderen Gruppen werden aufgeführt, um den Frequenzvorschriften in den verschiedenen Märkten und ländern zu genügen. Ihre Nutzung gewährleistet nicht in allen Fällen einen störungsfreien Betrieb.

CE62 Model / Modell CE62

Sony Original Channel Groups / Sony Kanalgruppen

GP/CH indication (example) / GP/CH-Anzeige (Beispiel): 00.62 17

Group 00: 111-channel group (single-channel operation) / **Gruppe 00:** 111-Kanal-Gruppe (Einkanalbetrieb)

TV-62 Band / TV-62-Frequenzbereich				TV-63 Band / TV-63-Frequenzbereich					
WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-17	800.125	62-41	803.125	**63-00**	**806.000**	63-24	809.000	63-48	812.000
62-18	800.250	62-42	803.250	63-01	806.125	63-25	809.125	63-49	812.125
62-19	800.375	62-43	803.375	63-02	806.250	63-26	809.250	**63-50**	**812.250**
62-20	**800.500**	62-44	803.500	63-03	806.375	63-27	809.375	63-51	812.375
62-21	800.625	62-45	803.625	63-04	806.500	63-28	809.500	63-52	812.500
62-22	800.750	62-46	803.750	63-05	806.625	63-29	809.625	63-53	812.625
62-23	800.875	62-47	803.875	63-06	806.750	**63-30**	**809.750**	63-54	812.750
62-24	801.000	62-48	804.000	63-07	806.875	63-31	809.875	63-55	812.875
62-25	801.125	62-49	804.125	63-08	807.000	63-32	810.000	63-56	813.000
62-26	801.250	**62-50**	**804.250**	63-09	807.125	63-33	810.125	63-57	813.125
62-27	801.375	62-51	804.375	**63-10**	**807.250**	63-34	810.250	63-58	813.250
62-28	801.500	62-52	804.500	63-11	807.375	63-35	810.375	63-59	813.375
62-29	801.625	62-53	804.625	63-12	807.500	63-36	810.500	**63-60**	**813.500**
62-30	**801.750**	62-54	804.750	63-13	807.625	63-37	810.625	63-61	813.625
62-31	801.875	62-55	804.875	63-14	807.750	63-38	810.750	63-62	813.750
62-32	802.000	62-56	805.000	63-15	807.875	63-39	810.875	63-63	813.875
62-33	802.125	62-57	805.125	63-16	808.000	**63-40**	**811.000**		
62-34	802.250	62-58	805.250	63-17	808.125	63-41	811.125		
62-35	802.375	62-59	805.375	63-18	808.250	63-42	811.250		
62-36	802.500	**62-60**	**805.500**	63-19	808.375	63-43	811.375		
62-37	802.625	62-61	805.625	**63-20**	**808.500**	63-44	811.500		
62-38	802.750	62-62	805.750	63-21	808.625	63-45	811.625		
62-39	802.875	62-63	805.875	63-22	808.750	63-46	811.750		
62-40	**803.000**			63-23	808.875	63-47	811.875		

Wireless Channel Lists / Übertragungskanallisten

Group 01/Gruppe 01
8-channel group
8-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-17	800.125
62-21	800.625
62-32	802.000
62-50	804.250
63-10	807.250
63-12	807.500
63-31	809.875
63-58	813.250

Group 03/Gruppe 03
8-channel group
8-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-19	800.375
62-30	801.750
62-38	802.750
62-58	805.250
63-08	807.000
63-25	809.125
63-41	811.125
63-62	813.750

Group 13/Gruppe 13
12-channel group
12-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-17	800.125	63-15	807.875
62-22	800.750	63-26	809.250
62-32	802.000	63-40	811.000
62-34	802.250	63-46	811.750
62-50	804.250	63-49	812.125
62-58	805.250	63-53	812.625

Group 02/Gruppe 02
9-channel group
9-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-18	800.250
62-23	800.875
62-46	803.750
62-56	805.000
62-59	805.375
63-14	807.750
63-22	808.750
63-29	809.625
63-38	810.750

Group 04/Gruppe 04
10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-20	800.500
62-22	800.750
62-25	801.125
62-29	801.625
62-35	802.375
62-47	803.875
63-06	806.750
63-27	809.375
63-43	811.375
63-60	813.500

German User Group-3
Deutsche Benutzergruppe-3

GP/CH indication (example) / GP/CH-Anzeige (Beispiel):
62A 04

Group 62A/Gruppe 62A
7-channel group
7-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-A04	800.325
62-A05	800.900
62-A06	801.725
62-A07	802.825
62-A08	803.350
62-A09	804.100
62-A10	804.575

Group 62B/Gruppe 62B
8-channel group
8-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-B05	800.375
62-B06	800.950
62-B07	801.775
62-B08	802.875
62-B09	803.400
62-B10	804.150
62-B11	804.625
62-B12	805.600

WL Channel = Wireless Channel
WL-Kanal = Übertragungskanal

Wireless Channel Lists / Übertragungskanallisten

German User Group-4
Deutsche Benutzergruppe-4

GP/CH indication (example) / GP/CH-Anzeige (Beispiel):
62E 02

Group 62E/Gruppe 62E
10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-E02	800.525
62-E03	801.100
62-E04	801.425
62-E05	801.975
62-E06	802.575
62-E07	803.050
62-E08	803.700
62-E09	804.800
62-E10	805.050
62-E11	805.775

Group 63E/Gruppe 63E
11-channel group
11-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-E01	806.850
63-E02	808.525
63-E03	809.100
63-E04	809.425
63-E05	809.975
63-E06	810.575
63-E07	811.050
63-E08	811.700
63-E09	812.800
63-E10	813.050
63-E11	813.775

Group 62C/Gruppe 62C
7-channel group
7-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-C04	800.425
62-C05	801.000
62-C06	801.825
62-C07	802.925
62-C08	803.450
62-C09	804.675
62-C10	805.650

Group 63A/Gruppe 63A
10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-A01	806.250
63-A02	807.200
63-A03	807.900
63-A04	808.325
63-A05	808.900
63-A06	809.725
63-A07	810.825
63-A08	811.350
63-A09	812.100
63-A10	812.575

Group 63C/Gruppe 63C
10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-C01	806.350
63-C02	806.750
63-C03	807.300
63-C04	808.425
63-C05	809.000
63-C06	809.825
63-C07	810.925
63-C08	811.450
63-C09	812.675
63-C10	813.650

Group 62D/Gruppe 62D
7-channel group
7-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-D04	800.475
62-D05	801.050
62-D06	801.875
62-D07	802.975
62-D08	803.500
62-D09	804.725
62-D10	805.700

Group 63B/Gruppe 63B
12-channel group
12-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-B01	806.300
63-B02	806.700
63-B03	807.250
63-B04	807.950
63-B05	808.375
63-B06	808.950
63-B07	809.775
63-B08	810.875
63-B09	811.400
63-B10	812.150
63-B11	812.625
63-B12	813.600

Group 63D/Gruppe 63D
10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-D01	806.400
63-D02	806.800
63-D03	807.350
63-D04	808.475
63-D05	809.050
63-D06	809.875
63-D07	810.975
63-D08	811.500
63-D09	812.725
63-D10	813.700

German User Groups / Deutsche Benutzergruppen

GP/CH indication (example) / GP/CH-Anzeige (Beispiel): 62 080

Group 62: 241-channel group (single-channel operation) / **Gruppe 62:** 241-Kanal-Gruppe (Einkanalbetrieb)
Frequency range: 800.000 to 806.000 MHz / Frequenzbereich: 800,000 bis 806,000 MHz

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-080	**800.000**	62-107	800.675	62-134	801.350	62-161	802.025
62-081	800.025	62-108	800.700	62-135	801.375	62-162	802.050
62-082	800.050	62-109	800.725	62-136	801.400	62-163	802.075
62-083	800.075	**62-110**	**800.750**	62-137	801.425	62-164	802.100
62-084	800.100	62-111	800.775	62-138	801.450	62-165	802.125
62-085	800.125	62-112	800.800	62-139	801.475	62-166	802.150
62-086	800.150	62-113	800.825	**62-140**	**801.500**	62-167	802.175
62-087	800.175	62-114	800.850	62-141	801.525	62-168	802.200
62-088	800.200	62-115	800.875	62-142	801.550	62-169	802.225
62-089	800.225	62-116	800.900	62-143	801.575	**62-170**	**802.250**
62-090	**800.250**	62-117	800.925	62-144	801.600	62-171	802.275
62-091	800.275	62-118	800.950	62-145	801.625	62-172	802.300
62-092	800.300	62-119	800.975	62-146	801.650	62-173	802.325
62-093	800.325	**62-120**	**801.000**	62-147	801.675	62-174	802.350
62-094	800.350	62-121	801.025	62-148	801.700	62-175	802.375
62-095	800.375	62-122	801.050	62-149	801.725	62-176	802.400
62-096	800.400	62-123	801.075	**62-150**	**801.750**	62-177	802.425
62-097	800.425	62-124	801.100	62-151	801.775	62-178	802.450
62-098	800.450	62-125	801.125	62-152	801.800	62-179	802.475
62-099	800.475	62-126	801.150	62-153	801.825	**62-180**	**802.500**
62-100	**800.500**	62-127	801.175	62-154	801.850	62-181	802.525
62-101	800.525	62-128	801.200	62-155	801.875	62-182	802.550
62-102	800.550	62-129	801.225	62-156	801.900	62-183	802.575
62-103	800.575	**62-130**	**801.250**	62-157	801.925	62-184	802.600
62-104	800.600	62-131	801.275	62-158	801.950	62-185	802.625
62-105	800.625	62-132	801.300	62-159	801.975	62-186	802.650
62-106	800.650	62-133	801.325	**62-160**	**802.000**	62-187	802.675

Wireless Channel Lists / Übertragungskanallisten

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
62-188	802.700	62-222	803.550	62-256	804.400	**62-290**	**805.250**
62-189	802.725	62-223	803.575	62-257	804.425	62-291	805.275
62-190	**802.750**	62-224	803.600	62-258	804.450	62-292	805.300
62-191	802.775	62-225	803.625	62-259	804.475	62-293	805.325
62-192	802.800	62-226	803.650	**62-260**	**804.500**	62-294	805.350
62-193	802.825	62-227	803.675	62-261	804.525	62-295	805.375
62-194	802.850	62-228	803.700	62-262	804.550	62-296	805.400
62-195	802.875	62-229	803.725	62-263	804.575	62-297	805.425
62-196	802.900	**62-230**	**803.750**	62-264	804.600	62-298	805.450
62-197	802.925	62-231	803.775	62-265	804.625	62-299	805.475
62-198	802.950	62-232	803.800	62-266	804.650	**62-300**	**805.500**
62-199	802.975	62-233	803.825	62-267	804.675	62-301	805.525
62-200	**803.000**	62-234	803.850	62-268	804.700	62-302	805.550
62-201	803.025	62-235	803.875	62-269	804.725	62-303	805.575
62-202	803.050	62-236	803.900	**62-270**	**804.750**	62-304	805.600
62-203	803.075	62-237	803.925	62-271	804.775	62-305	805.625
62-204	803.100	62-238	803.950	62-272	804.800	62-306	805.650
62-205	803.125	62-239	803.975	62-273	804.825	62-307	805.675
62-206	803.150	**62-240**	**804.000**	62-274	804.850	62-308	805.700
62-207	803.175	62-241	804.025	62-275	804.875	62-309	805.725
62-208	803.200	62-242	804.050	62-276	804.900	**62-310**	**805.750**
62-209	803.225	62-243	804.075	62-277	804.925	62-311	805.775
62-210	**803.250**	62-244	804.100	62-278	804.950	62-312	805.800
62-211	803.275	62-245	804.125	62-279	804.975	62-313	805.825
62-212	803.300	62-246	804.150	**62-280**	**805.000**	62-314	805.850
62-213	803.325	62-247	804.175	62-281	805.025	62-315	805.875
62-214	803.350	62-248	804.200	62-282	805.050	62-316	805.900
62-215	803.375	62-249	804.225	62-283	805.075	62-317	805.925
62-216	803.400	**62-250**	**804.250**	62-284	805.100	62-318	805.950
62-217	803.425	62-251	804.275	62-285	805.125	62-319	805.975
62-218	803.450	62-252	804.300	62-286	805.150	**62-320**	**806.000**
62-219	803.475	62-253	804.325	62-287	805.175		
62-220	**803.500**	62-254	804.350	62-288	805.200		
62-221	803.525	62-255	804.375	62-289	805.225		

Wireless Channel Lists / Übertragungskanallisten

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-121	809.025	63-155	809.875	63-189	810.725	63-223	811.575
63-122	809.050	63-156	809.900	**63-190**	**810.750**	63-224	811.600
63-123	809.075	63-157	809.925	63-191	810.775	63-225	811.625
63-124	809.100	63-158	809.950	63-192	810.800	63-226	811.650
63-125	809.125	63-159	809.975	63-193	810.825	63-227	811.675
63-126	809.150	**63-160**	**810.000**	63-194	810.850	63-228	811.700
63-127	809.175	63-161	810.025	63-195	810.875	63-229	811.725
63-128	809.200	63-162	810.050	63-196	810.900	**63-230**	**811.750**
63-129	809.225	63-163	810.075	63-197	810.925	63-231	811.775
63-130	**809.250**	63-164	810.100	63-198	810.950	63-232	811.800
63-131	809.275	63-165	810.125	63-199	810.975	63-233	811.825
63-132	809.300	63-166	810.150	**63-200**	**811.000**	63-234	811.850
63-133	809.325	63-167	810.175	63-201	811.025	63-235	811.875
63-134	809.350	63-168	810.200	63-202	811.050	63-236	811.900
63-135	809.375	63-169	810.225	63-203	811.075	63-237	811.925
63-136	809.400	**63-170**	**810.250**	63-204	811.100	63-238	811.950
63-137	809.425	63-171	810.275	63-205	811.125	63-239	811.975
63-138	809.450	63-172	810.300	63-206	811.150	**63-240**	**812.000**
63-139	809.475	63-173	810.325	63-207	811.175	63-241	812.025
63-140	**809.500**	63-174	810.350	63-208	811.200	63-242	812.050
63-141	809.525	63-175	810.375	63-209	811.225	63-243	812.075
63-142	809.550	63-176	810.400	**63-210**	**811.250**	63-244	812.100
63-143	809.575	63-177	810.425	63-211	811.275	63-245	812.125
63-144	809.600	63-178	810.450	63-212	811.300	63-246	812.150
63-145	809.625	63-179	810.475	63-213	811.325	63-247	812.175
63-146	809.650	**63-180**	**810.500**	63-214	811.350	63-248	812.200
63-147	809.675	63-181	810.525	63-215	811.375	63-249	812.225
63-148	809.700	63-182	810.550	63-216	811.400	**63-250**	**812.250**
63-149	809.725	63-183	810.575	63-217	811.425	63-251	812.275
63-150	**809.750**	63-184	810.600	63-218	811.450	63-252	812.300
63-151	809.775	63-185	810.625	63-219	811.475	63-253	812.325
63-152	809.800	63-186	810.650	**63-220**	**811.500**	63-254	812.350
63-153	809.825	63-187	810.675	63-221	811.525	63-255	812.375
63-154	809.850	63-188	810.700	63-222	811.550	63-256	812.400

GP/CH indication (example) / GP/CH-Anzeige (Beispiel): 63 001

Group 63: 320-channel group (single-channel operation) / **Gruppe 63:** 320-Kanal-Gruppe (Einkanalbetrieb)

Frequency range: 806.025 to 814.000 MHz / Frequenzbereich: 806,025 bis 814,000 MHz

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-001	806.025	63-031	806.775	63-061	807.525	63-091	808.275
63-002	806.050	63-032	806.800	63-062	807.550	63-092	808.300
63-003	806.075	63-033	806.825	63-063	807.575	63-093	808.325
63-004	806.100	63-034	806.850	63-064	807.600	63-094	808.350
63-005	806.125	63-035	806.875	63-065	807.625	63-095	808.375
63-006	806.150	63-036	806.900	63-066	807.650	63-096	808.400
63-007	806.175	63-037	806.925	63-067	807.675	63-097	808.425
63-008	806.200	63-038	806.950	63-068	807.700	63-098	808.450
63-009	806.225	63-039	806.975	63-069	807.725	63-099	808.475
63-010	**806.250**	**63-040**	**807.000**	**63-070**	**807.750**	**63-100**	**808.500**
63-011	806.275	63-041	807.025	63-071	807.775	63-101	808.525
63-012	806.300	63-042	807.050	63-072	807.800	63-102	808.550
63-013	806.325	63-043	807.075	63-073	807.825	63-103	808.575
63-014	806.350	63-044	807.100	63-074	807.850	63-104	808.600
63-015	806.375	63-045	807.125	63-075	807.875	63-105	808.625
63-016	806.400	63-046	807.150	63-076	807.900	63-106	808.650
63-017	806.425	63-047	807.175	63-077	807.925	63-107	808.675
63-018	806.450	63-048	807.200	63-078	807.950	63-108	808.700
63-019	806.475	63-049	807.225	63-079	807.975	63-109	808.725
63-020	**806.500**	**63-050**	**807.250**	**63-080**	**808.000**	**63-110**	**808.750**
63-021	806.525	63-051	807.275	63-081	808.025	63-111	808.775
63-022	806.550	63-052	807.300	63-082	808.050	63-112	808.800
63-023	806.575	63-053	807.325	63-083	808.075	63-113	808.825
63-024	806.600	63-054	807.350	63-084	808.100	63-114	808.850
63-025	806.625	63-055	807.375	63-085	808.125	63-115	808.875
63-026	806.650	63-056	807.400	63-086	808.150	63-116	808.900
63-027	806.675	63-057	807.425	63-087	808.175	63-117	808.925
63-028	806.700	63-058	807.450	63-088	808.200	63-118	808.950
63-029	806.725	63-059	807.475	63-089	808.225	63-119	808.975
63-030	**806.750**	**63-060**	**807.500**	**63-090**	**808.250**	**63-120**	**809.000**

WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
63-257	812.425	63-291	813.275
63-258	812.450	63-292	813.300
63-259	812.475	63-293	813.325
63-260	**812.500**	63-294	813.350
63-261	812.525	63-295	813.375
63-262	812.550	63-296	813.400
63-263	812.575	63-297	813.425
63-264	812.600	63-298	813.450
63-265	812.625	63-299	813.475
63-266	812.650	**63-300**	**813.500**
63-267	812.675	63-301	813.525
63-268	812.700	63-302	813.550
63-269	812.725	63-303	813.575
63-270	**812.750**	63-304	813.600
63-271	812.775	63-305	813.625
63-272	812.800	63-306	813.650
63-273	812.825	63-307	813.675
63-274	812.850	63-308	813.700
63-275	812.875	63-309	813.725
63-276	812.900	**63-310**	**813.750**
63-277	812.925	63-311	813.775
63-278	812.950	63-312	813.800
63-279	812.975	63-313	813.825
63-280	**813.000**	63-314	813.850
63-281	813.025	63-315	813.875
63-282	813.050	63-316	813.900
63-283	813.075	63-317	813.925
63-284	813.100	63-318	813.950
63-285	813.125	63-319	813.975
63-286	813.150	**63-320**	**814.000**
63-287	813.175		
63-288	813.200		
63-289	813.225		
63-290	**813.250**		

Wireless Channel Lists / Übertragungskanallisten

CE69 Model / Modell CE69

Sony Original Channel Groups / Sony Kanalgruppen

GP/CH indication (example) / GP/CH-Anzeige (Beispiel): 00690 1

Group 00: 64-channel group (single-channel operation) / **Gruppe 00:** 64-Kanal-Gruppe (Einkanalbetrieb)

TV-69 Band / TV-69-Frequenzbereich					
WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)	WL Channel WL-Kanal	Frequency Frequenz (MHz)
69-01	854.125	69-23	856.875	69-45	859.625
69-02	854.250	69-24	857.000	69-46	859.750
69-03	854.375	69-25	857.125	69-47	859.875
69-04	854.500	69-26	857.250	69-48	860.000
69-05	854.625	69-27	857.375	69-49	860.125
69-06	854.750	69-28	857.500	**69-50**	**860.250**
69-07	854.875	69-29	857.625	69-51	860.375
69-08	855.000	**69-30**	**857.750**	69-52	860.500
69-09	855.125	69-31	857.875	69-53	860.625
69-10	**855.250**	69-32	858.000	69-54	860.750
69-11	855.375	69-33	858.125	69-55	860.875
69-12	855.500	69-34	858.250	69-56	861.000
69-13	855.625	69-35	858.375	69-57	861.125
69-14	855.750	69-36	858.500	69-58	861.250
69-15	855.875	69-37	858.625	69-59	861.375
69-16	856.000	69-38	858.750	**69-60**	**861.500**
69-17	856.125	69-39	858.875	69-61	861.625
69-18	856.250	**69-40**	**859.000**	69-62	861.750
69-19	856.375	69-41	859.125	69-63	861.875
69-20	**856.500**	69-42	859.250	69-64	862.000
69-21	856.625	69-43	859.375		
69-22	856.750	69-44	859.500		

WL Channel = Wireless Channel / WL-Kanal = Übertragungskanal

L-12

Group 01/Gruppe 01

10-channel group
10-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
69-01	854.125
69-03	854.375
69-07	854.875
69-18	856.250
69-27	857.375
69-34	858.250
69-46	859.750
69-56	861.000
69-59	861.375
69-64	862.000

UK General Use Groups
Gruppen für allgem. Verwendung in Großbritannien

GP/CH indication (example) / GP/CH-Anzeige (Beispiel):
L UG0 1

Group L/Gruppe L

7-channel group
7-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
UG-01	854.900
UG-02	855.275
UG-03	855.900
UG-04	856.175
UG-05	856.575
UG-06	857.625
UG-07	857.950

Group H/Gruppe H

7-channel group
7-Kanal-Gruppe

WL Channel WL-Kanal	Frequency Frequenz (MHz)
UG-08	858.200
UG-09	858.650
UG-10	860.400
UG-11	860.900
UG-12	861.200
UG-13	861.550
UG-14	861.750

SONY

3-866-337-31(1)

UHF Synthesized Wireless Microphone

Operating Instructions

WRT-807A

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AU66

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Precautions

- The unit is designed for use in ambient temperature range of 0°C to 50°C (32°F to 122°F).
- Do not place the unit on or near heat sources, such as lighting equipment, power amplifiers, or in a place subject to direct sunlight or excessive moisture. In such places, the external finish or internal parts of the unit may be damaged.
- If the unit is used in a very humid or dusty place or in a place subject to an active gas, clean its surface as well as the connectors with a dry, soft cloth soon after use. Lengthy use of the unit in such places or not cleaning it after its use in such places may shorten its life.
- When cleaning the unit, never use organic solvents such as thinners or benzine, which will damage the finish of the unit.
- The unit has been factory adjusted precisely. Do not tamper with its internal parts or attempt to repair it.
- Do not attempt to recharge an alkaline battery.
- Do not dispose of a battery in fire. Do not disassemble or short-cirtuit a battery.
- Make sure to use an LR6 (size-AA) alkaline battery.
- Make sure the poles of the battery match the + and – markings in the battery holder.
- Remove the battery when the unit will not be used for a long period of time.

Introduction

The WRT-807A is a UHF-synthesized wireless microphone for use in a 800-MHz band UHF-synthesized wireless microphone system.
The WRT-807A operates in conjunction with the WRR-800A/801A/802A, MB-806A UHF Synthesized Tuner for vocal concentration.

The WRT-807A can be also used with existing Sony wireless microphone systems consisting of the WRT-810A/820A/822A/830A UHF Synthesized Transmitter and WRR-810A/820A/840A/850A UHF Synthesized Tuner.

The microphone/transmitter and tuners of wireless microphone systems are classified by frequency band.
A 14-MHz frequency band (or two consecutive-numbered TV channels, such as 66 and 67 of the WRT-807A) is assigned to each microphone/transmitter and tuner model.
In building a UHF wireless microphone system, be sure to pair a microphone/transmitter with a tuner that has the same TV channel number.

Features

Phase Locked Loop (PLL) synthesized system
The WRT-807A features a refined phase locked loop (PLL) synthesizer circuit.

POWER switch with holding function
The POWER switch can be locked in the ON position to protect against accidental power cut-offs.

Low-battery notification on tuner
When the microphone battery is low, the microphone sends a warning to the WRR-800A/801A/802A/805A/850A, MB-806A in the form of "Battery status information."
This information is sent to the WRR-800A/801A/802A/805A/850A, MB-806A about one hour before the battery goes dead to allow the battery to be safely replaced.
When the WRR-800A/801A/802A/805A/850A, MB-806A receives this information, the LED and the LCD on tuner panel start to flash.

Powered by readily available battery type
The built-in, high-efficiency DC-DC converter provides about five hours of continuous and stable operation with just a single LR6 (size-AA) alkaline battery.

LCD readout of various information
The microphones LCD shows the current channel number, frequency, input attenuation setting, and residual battery power.
The accumulated battery use time is also indicated (in one-minute increments) to allow precise monitoring of battery use.

Automatic saving of channel and input attenuation settings
All channel and input attenuation settings are automatically saved when the microphone is turned off (and are maintained even when the battery is removed), thus eliminating the need to make the same settings again the next time you use the microphone.

Highly reliable electronic attenuator
Adjustable in a range of 0 dB to 21 dB in 3-dB steps, the built-in input level attenuator reduces signal distortion during the input of excessively strong audio signals.

Tone signal-incorporated RF carrier signal
The microphone transmits an RF carrier signal that incorporates a tone signal to enable any tuner with a tone squelch circuit to pick out only the target audio signal.

Wide dynamic range and low noise
The microphones compander (compressor/expander) system enables transmission over a wide dynamic range with minimum noise.

Notes on operation

- When operating two or more microphones, keep the microphones separated from each other by a distance of at least 30 cm (1 foot).
- Keep microphones at least 3 meters (10 feet) away from the receiving antenna.

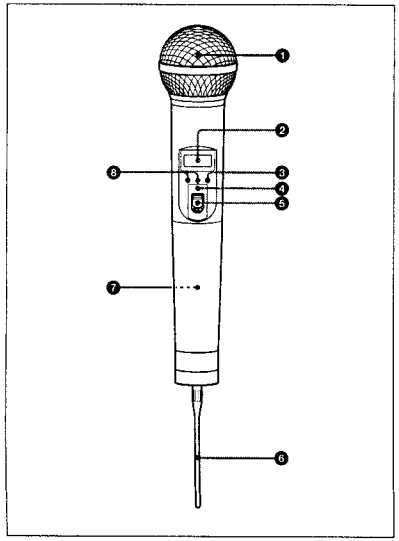
Channels and Carrier Frequencies

The WRT-807A can transmit on any selected wireless channel among those listed below.

For channel selection, see "Changing the Channel Selection" on page 12.

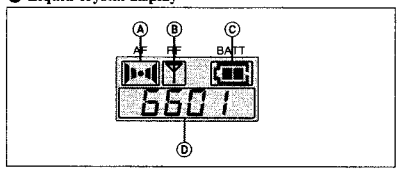
WL Channel	Frequency (MHz)	WL Channel	Frequency (MHz)	WL Channel	Frequency (MHz)	WL Channel	Frequency (MHz)
66-01	792.250	66-27	795.500	67-01	799.250	67-27	802.500
66-02	792.375	66-28	795.625	67-02	799.375	67-28	802.625
66-03	792.500	66-29	795.750	67-03	799.500	67-29	802.750
66-04	792.625	**66-30**	**795.875**	67-04	799.625	**67-30**	**802.875**
66-05	792.750	66-31	796.000	67-05	799.750	67-31	803.000
66-06	792.875	66-32	796.125	67-06	799.875	67-32	803.125
66-07	793.000	66-33	796.250	67-07	800.000	67-33	803.250
66-08	793.125	66-34	796.375	67-08	800.125	67-34	803.375
66-09	793.250	66-35	796.500	67-09	800.250	67-35	803.500
66-10	**793.375**	66-36	796.625	**67-10**	**800.375**	67-36	803.625
66-11	793.500	66-37	796.750	67-11	800.500	67-37	803.750
66-12	793.625	66-38	796.875	67-12	800.625	67-38	803.875
66-13	793.750	66-39	797.000	67-13	800.750	67-39	804.000
66-14	793.875	**66-40**	**797.125**	67-14	800.875	**67-40**	**804.125**
66-15	794.000	66-41	797.250	67-15	801.000	67-41	804.250
66-16	794.125	66-42	797.375	67-16	801.125	67-42	804.375
66-17	794.250	66-43	797.500	67-17	801.250	67-43	804.500
66-18	794.375	66-44	797.625	67-18	801.375	67-44	804.625
66-19	794.500	66-45	797.750	67-19	801.500	67-45	804.750
66-20	**794.625**	66-46	797.875	**67-20**	**801.625**	67-46	804.875
66-21	794.750	66-47	798.000	67-21	801.750	67-47	805.000
66-22	794.875	66-48	798.125	67-22	801.875	67-48	805.125
66-23	795.000	66-49	798.250	67-23	802.000	67-49	805.250
66-24	795.125	**66-50**	**798.375**	67-24	802.125	**67-50**	**805.375**
66-25	795.250	66-51	798.500	67-25	802.250	67-51	805.500
66-26	795.375			67-26	802.375		

Parts Identification



❶ Wind screen
Protects against noise caused by wind.

❷ Liquid-crystal display



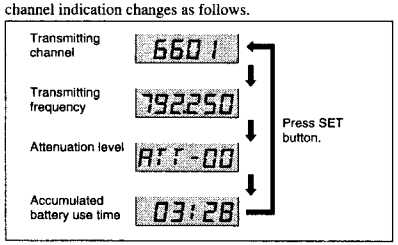
Ⓐ AF (audio input) indication
Lights whenever an audio signal stronger than the reference level is received.

Ⓑ RF (antenna output) indication
Lights during signal transmission from the antenna.

Ⓒ BATT (battery) indication
Shows the battery condition.
See "Battery indication" on page 8.

Parts Identification

Ⓓ CH (channel) indication
Displays the transmitting channel.
Each time you press the SET button in Transmit mode, the channel indication changes as follows.

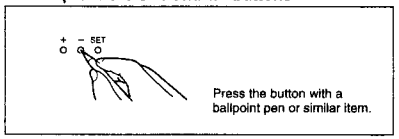


Transmitting channel: The current transmitting channel setting.
Transmitting frequency: The current transmitting frequency setting.
Attenuation: The input attenuation setting in decibels. Can be set within a range of 0 dB to 21 dB in 3-dB steps.
Accumulated battery use time: The accumulated time of battery use (in 1-minute increments).

To adjust these parameters, see "Changing the Transmitting Channel" on page 9, "Changing the Input Attenuation Setting" on page 11 or "Resetting the Accumulated Battery Use Time Indication" on page 12.

❸ SET button
In Transmit mode, press this button to change the indicated items in the lower half of the liquid-crystal display.
To change to Setting mode, turn the POWER switch to ON while holding this button down. Then press this button to select the items to be indicated.

How to press the SET and +/– buttons

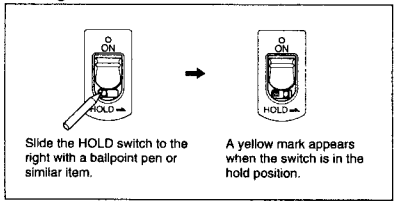


For details on Setting mode, see "Settings" on page 9.

❹ POWER indicator
Lights when the microphone is on.

❺ POWER switch
Turns the microphone ON or OFF.
When you set this switch to ON without holding down any other button, the microphone enters Transmit mode, and the signal of the selected channel is transmitted.
The HOLD switch appears when the POWER switch is set to ON.
Set the HOLD switch to the lock position to prevent an accidental power cut-off during microphone operation.

Locking the POWER switch


ON
HOLD
ON
HOLD
Slide the HOLD switch to the right with a ballpoint pen or similar item.
A yellow mark appears when the switch is in the hold position.

❻ Antenna

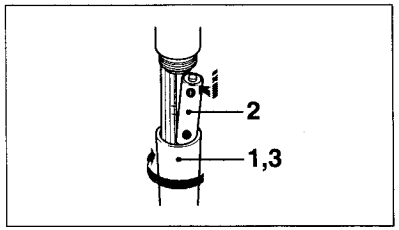
❼ Battery holder
Insert the battery here.
For details on inserting the battery, see "Power Supply" on page 8.

❽ + (+ selection) / – (– selection/reset) buttons
In Setting mode, use these buttons to select the transmitting channel and attenuation level, and use the – button to reset the accumulated battery use time indication to 00:00.
For details on Setting mode, see "Settings" on page 9.

Power Supply

The microphone can operate on one LR6 (size AA) alkaline battery continuously for about 5 hours at 25 °C (77°F).

Inserting the battery



1 Turn the grip in the direction of the arrow to open the battery holder.

2 Match the battery to the polarity markings and insert it into the battery holder.

3 Close the battery holder and lock the grip by turning it in the opposite direction of the arrow.

Battery indication

When you turn the power on, the battery condition is indicated by the BATT indication in the liquid-crystal display.

	1	2	3	4
BATT indication	Lights	Lights	Flashes	Goes off
Battery condition	Good	Less than half-charge	Almost exhausted	Completely exhausted

Note

The indication may be incorrect if the battery was not new when inserted. If you plan to use the microphone for a long period, replace the battery with a new one.

Settings

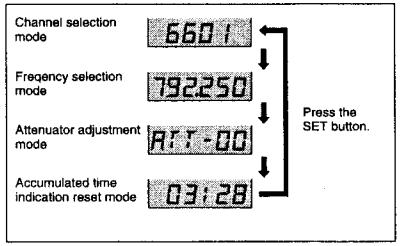
Initiating Setting Mode

Enter Setting mode to change the transmitting channel, the transmitting frequency and the attenuation level, or to reset the accumulated battery use time indication.

To enter Setting mode

While holding down the SET button, turn the POWER switch to ON.
Hold the SET button down until an indication appears on the liquid-crystal display.

The microphone enters Setting mode and the indication before the microphone was previously turned OFF flashes on the liquid-crystal display.
Pressing the SET button cycles the modes in the order of Channel selection mode, Frequency selection mode (page 9), Attenuator adjustment mode (page 11) and Accumulated time indication reset mode (see page 12).



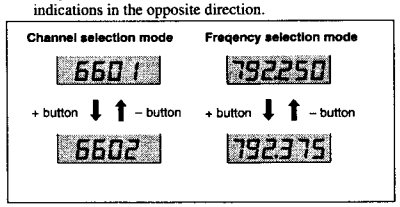
Changing the Transmitting Channel

The transmitting channel can be selected through either the channel number or the frequency.

1 Set the microphone to Setting mode.
If the channel number (or frequency) indication does not appear, press the SET button until the channel number (or frequency) indication appears.

Setting

2 Press the + or – button to select the channel number (or frequency).
Pressing the + button cycles the indication in the order shown in the tables of "Channels and Carrier Frequencies" on page 5. Pressing the – button cycles the indications in the opposite direction.



Hold down the button to change the channel number (or frequency) quickly.

3 When the desired channel number (or frequency) appears, turn the POWER switch to OFF to release Setting mode, or press the SET button to continue operations in Setting mode.

The next time you turn on the microphone (by turning the POWER switch to ON), the microphone will enter Transmit mode with the selected channel number (or frequency).

Notes

- The microphone cannot transmit in Setting mode.
- Make sure that the channel selected on the microphone is the same as that selected on the tuner being used in the same system.
- Depending on the noise or interference conditions, all selectable channels may not be usable. If necessary, you can determine which channels are usable by cycling the channel selection through a number of channels on the tuner with the microphone set to OFF. Those channels for which the RF indicator on the tuner does not light are usable.
- The microphone may not operate correctly if it is turned on immediately after being turned off in Setting mode. Wait for a few seconds before turning the power on again.

Changing the Input Attenuation Setting

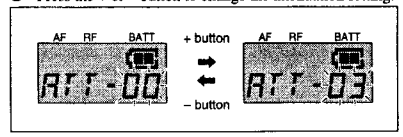
The input attenuation setting can be changed within a range of 0 dB to 21 dB (in 3-dB steps) in either Setting mode or Transmit mode.

Changing the input attenuation in Setting mode

1 Set the microphone to Setting mode.

2 If the attenuation level is not displayed, press the SET button until it appears.

3 Press the + or – button to change the attenuation setting.



Hold down the button to change the level quickly.

4 Once the desired level appears, turn the POWER switch to OFF to release Setting mode, or press the SET button to continue operations in Setting mode.

The next time you turn on the microphone (by turning the POWER switch to ON), the microphone enter Transmit mode with the selected attenuation setting.

Changing the input attenuation in Transmit mode

You can also change the input attenuation setting while transmitting in Transmit mode.

1 If the attenuation level is not displayed, press the SET button until it appears.

2 Press the + or – button to change the attenuation setting.

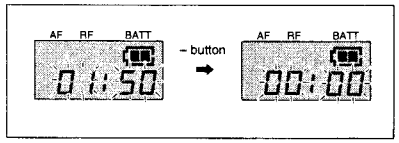
Resetting the Accumulated Battery Use Time Indication

The accumulated battery use time is the total time (in hours and minutes) the battery has been used. It is recorded whenever the WRT-807A is on.
Reset the indication to 00:00 whenever you replace the battery.

1 Set the microphone to Setting mode.

2 If the accumulated battery use time is not displayed, press the SET button until it appears.

3 Press the – button.
The indication resets to 00:00.



Press the + button while the 00:00 indication is on to go back to previous value.

4 Turn the POWER switch to OFF to release Setting mode.

Troubleshooting

If you have any problem using this unit, use the following checklist. Should any problem persist, consult your Sony dealer.

Symptom	Meaning/Remedy
The microphone does not turn on.	• The + and – poles of the battery do not match those of the battery compartment. ➧ Insert the battery with the poles correctly matched. • The battery is exhausted. ➧ Replace the battery with new one. • The battery terminals in the microphone are dirty. ➧ Clean the + and – terminals with a cotton swab.
The battery runs down quickly.	• The battery is exhausted. ➧ Replace the battery with new one. • A manganese battery is being used. ➧ Use an alkaline battery. The battery life of a manganese battery is less than half that of an alkaline battery. • The microphone is being used under cold conditions. ➧ The battery runs down quickly under cold conditions.
The microphone cannot be turned off.	The HOLD switch is in locked position. ➧ Change the HOLD switch to the unlocked position.
The channel cannot be changed.	An attempt was made to change the channel by pressing the SET button only. ➧ Turn the microphone off, then turn the microphone on again while holding down the SET button. Then change the channel with the + and – buttons.
There is no sound.	• The indication on the LCD is flashing. ➧ The microphone is in channel setting mode. Turn the power off, then on again. • The channel setting on the microphone is different from that on the tuner. ➧ Use the same channel setting for both the microphone and tuner. • The AF or RF indicator does not turn on. ➧ Confirm that the microphone and tuner are both turned on.

Symptom	Meaning/Remedy
The sound is weak.	• The attenuation level setting is too high. ➧ The output level is low. Press the – button in attenuation level setting mode to lower the attenuation level. • The volume on the amplifier, mixer or tuner is low. ➧ Adjust the volume.
There is distortion in the sound.	The attenuation level setting is too low. ➧ The input level is extremely high. Press the + button in attenuation level setting mode to raise the attenuation level.
There is sound interruption or noise.	• The receiver's antenna is incorrectly connected. ➧ Connect the antenna correctly according to the operation manual of the tuner or antenna divider. • The antenna divider is turned off. ➧ Turn the antenna divider on. It is possible for the tuner to receive signals even when the antenna divider is turned off, but sound interruption or noise may occur. • The RF indicator lights even when the microphone is off. ➧ Jammed transmissions are being received. Determine which channels are usable (i.e., channels for which the RF indicator on the tuner does not light) and set the tuner and microphone to the same usable channel. • Two or more microphones are set to the same channel. ➧ Make sure no two microphones are set to the same channel. Set each microphone to a different channel.

Specifications

Transmitter and modulator section

Oscillator	Crystal controlled PLL synthesizer
Type of emission	F3E
Carrier frequencies	792.250 to 805.500 MHz
RF power output	10 mW (50-ohm load)
Tone signal	32.768 kHz
Battery condition signal	32.782 kHz
Type of antenna	1/4 -wavelength wire

Audio section

Microphone type	uni-directional dynamic microphone
Pre-emphasis	50 µs
Deviation	±5 kHz (94 dB_{SPL}[1]), 1 kHz input)
Frequency response	50 to 15,000 Hz
Signal-to-noise ratio	57 dB or more (A-weighted, modulation frequency 1 kHz, with ±5 kHz deviation at WRR-800A/801A)
Audio attenuator	0 to 21 dB, variable in 3-dB steps
Input level	151 dB_{SPL} (at audio attenuator 21 dB)

Power section

Power requirements	1.5 V DC (one LR6/size AA alkaline battery)
Battery life	Approx. 5 hours at 25°C or 77°F, with Sony LR6 alkaline battery

General

Operating temperature	0°C to +50°C (32°F to 122°F)
Storage temperature	–30°C to +60°C (–22°F to +140°F)
Dimensions	51 × 238 mm (diameter/length) not including antenna (2-1/8 × 9-3/8 inches)
Mass	Approx. 440 g (15.5 oz) including battery

Supplied accessory

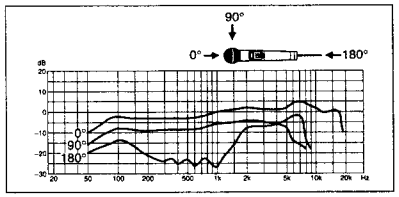
Operating Instructions (1)
Microphone holder (1)
Stand adaptor (PF 1/2 to W 3/8) (1)

Design and specifications are subject to change without notice.

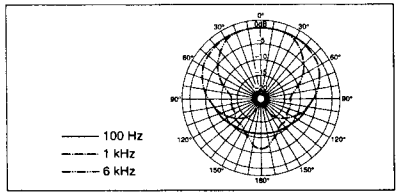
1) 0 dB_{SPL} = 2 × 10^{-5} Pa

Specifications

Standard frequency response



Standard directivity response



Error Messages

When a problem occurs, one of the following error messages may appear on the display.

Message	Contents	Measures
Error 11	An error occurred in backup memory data.	The data was initialized. Set the transmitting channel and the input attenuation again.
Error 21	The PLL synthesized circuit is in trouble.	Contact your Sony dealer.
Error 31	The battery voltage exceeds the allowable value.	Use the specified battery.
Error 41	Defect of an internal circuit.	Contact your Sony dealer.
Error 51	Defect of the A/D converter circuit.	
Error 61	Defect of an internal circuit.	